Research and Recommendations

Using the CLASS™ Measure in Family Child Care Homes

by Virginia E. Vitiello, PhD

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Executive Summary

As states work to improve early childhood care and education, there is a growing interest in including family child care (FCC) providers in monitoring and improvement efforts. The Classroom Assessment Scoring System™ (CLASS™), a measure of teacher-child interactions, has been central to many of these efforts because of its strong and demonstrated links to better child outcomes. However, there is little published evidence that the CLASS measure is valid in FCC homes, and there have been few attempts to identify best practices for its use in these settings. The purpose of this white paper is to address these questions.

Data from two small studies suggest that pre-K CLASS scores follow the same basic patterns in FCC homes as in center-based classrooms, with higher scores in Emotional Support and Classroom Organization and the lowest scores in Instructional Support. Toddler CLASS scores were similar, with higher scores in Emotional and Behavioral Support and lower scores in Engaged Support for Learning. As in classrooms, this indicates that FCC homes need the most support in providing cognitively and linguistically stimulating environments for children.

Observations conducted by Teachstone coders revealed several challenges of observing in FCC homes:

1. **FCC homes often include children across multiple age levels of the CLASS measure.**

   We recommend alternating between two age levels to best capture the interactions experienced by most of the children in the setting.

2. **FCC homes often serve low numbers of children.**

   We recommend establishing a protocol for how many children at the target age level must be present in order to conduct the observation. It may be necessary to observe a single child interacting with the caregiver at times.

3. **FCC homes can challenge observers' objectivity.**

   Small spaces, observing in the provider's home, and observing caregivers and children who are related can influence observers as they code. We recommend that observers stay grounded in the CLASS manual and hold debriefing sessions to discuss staying reliable in the face of these challenges.

4. **FCC homes can have multiple adults.**

   When multiple caregivers are present that move around from room to room, we recommend staying with an *individual caregiver* if the focus of the observation is on the quality of interactions provided by that individual, and staying with the *majority of children* if the purpose is to evaluate the quality provided by the FCC home as a whole. For non-caregiver adults, observers should include them in coding only if they enhance or detract from the interactions experienced by the children.

For professional development, we recommend that all providers begin with an introduction to the CLASS measure and teacher-child interactions. We then recommend balancing between deepening their knowledge of a single dimension with broadening their knowledge across age levels. For example, providers can do in-depth study of language interactions by learning about Language Modeling in the Toddler age level, then extending their study to Language Modeling in the pre-K age level.

Although there is more to learn, FCC providers serve a significant number of children each year and can benefit from a focus on improving interactions. The CLASS measure provides a framework for observing and providing professional development to these caregivers. As in center-based care, a focus on interactions can support stronger cognitive, social, and behavioral growth in young children.

Using the CLASS Measure in Family Child Care Homes

The United States is currently making unprecedented efforts to improve early child care and education. Federally, the Race to the Top–Early Learning Challenge (RTT–ELC) is pushing states to address quality and access for children in poverty. At the state level, Quality Rating and Improvement Systems (QRISs) are bringing transparency and a spotlight on quality to many providers. Many programs are focusing on teacher-child interactions as a means of boosting quality and improving child outcomes. The CLASS measure of teacher-child interactions is central to many of these efforts.

State and federal programs are moving beyond traditional classroom-based care to reach out to family child care providers. A focus on teacher-child interactions may resonate strongly with these providers because they can occur regardless of the space, materials, or furnishings available in the child-care setting. But family child care (FCC) homes are unique in many ways and pose challenges for observers and professional development providers.

The purpose of this brief is to explore what is known about teacher-child interactions in FCC homes and how the CLASS framework can be applied in these settings.

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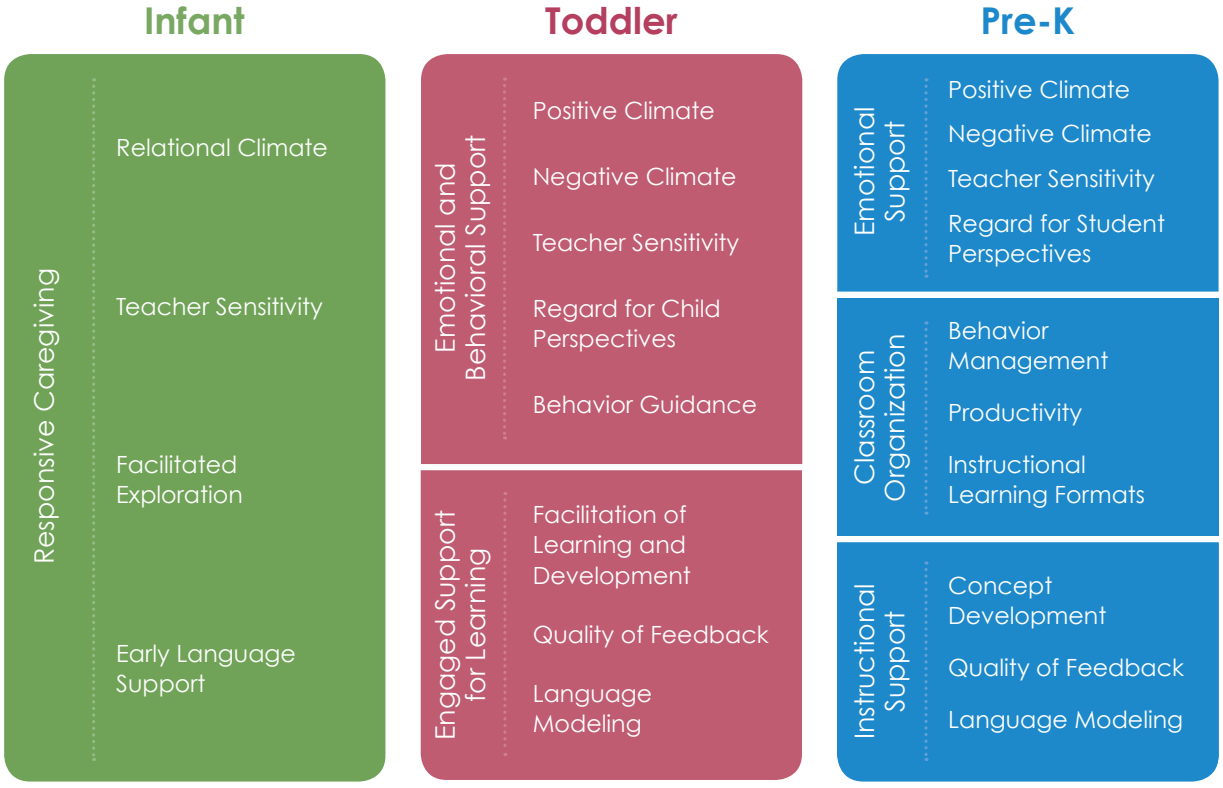
The CLASS measure is an observational tool focused on the provider-child interactions that increase children's learning and development. At each age level, the CLASS measure organizes developmentally appropriate interactions into domains and dimensions. The CLASS measure is part of the larger CLASS system, which integrates measurement and improvement resources.



Background

A small but substantial number of children attend family child care; estimates range as high as 15% of children under five (NACCRRA, 2012a). Compared to children in center-based care, they tend to be at greater risk for difficulty in school due to poverty, low maternal education levels, and single parenthood. Children in FCC homes also tend to be younger, on average, than children in center-based care, in part because many parents move their children into centers as they get closer to school age (Porter, Paulsell, Del Grosso, Avellar, Hass, & Vuong, 2010).

Researchers hypothesize that the growing professionalism of the early childhood workforce, driven in part by state QRISs, has especially benefitted FCC providers.

Because provider-child ratios tend to be low in FCC homes, FCC providers make up nearly a quarter of the early childhood workforce (US Government Accountability Office (GAO), 2012). Early childhood workers have historically had low education levels and poor wages, and this is especially true for FCC providers: surveys suggest that about half have a high school degree or less, and income among these providers is significantly lower than providers in school-based classrooms (Bassok, Fitzpatrick, Loeb, & Paglayan, *in press*; US GAO, 2012). Yet conditions for FCC providers have improved substantially over the past 20 years. Although enrollment in FCC homes has decreased slightly as center-based care has expanded, FCC providers' incomes, education levels, and job stability have all increased (Bassok et al., *in press*). Researchers hypothesize that the growing professionalism of the early childhood workforce, driven in part by state QRISs, has especially benefitted FCC providers.

Quality in Family Child Care

The term "family child care" incorporates a wide range of settings that can provide very different levels of quality. FCC providers include highly committed professionals who have several rooms designated for child care and employ additional caregivers, as well as parents who want to earn money while staying at home with their own children[1]. Adding to the complexity, regulations governing child care vary from state to state, and many FCC homes are not subject to licensing or oversight (NACCRA, 2012b).

Although the CLASS observation tool is used in FCC homes across the country, no studies published to date have examined scores in these settings. In fact, relatively little research has been done in the past decade on quality in FCC homes. The research that does exist, using various measures of quality, highlights benefits of FCC homes as well as a few drawbacks. FCC providers tend to care for fewer children, which can result in closer bonds and more time spent directly interacting with each child (Porter et al., 2010). Levels of language stimulation can be higher in FCC homes than in centers (Dowsett, Huston, & Imes, 2008). On the other hand, children in FCC homes spend more time watching television, less time in learning activities, and receive less cognitive stimulation (Dowsett et al., 2008; Porter et al., 2010).

Several studies hint that the processes at work in center-based care are also at work in FCC homes. A study that looked at predictors of quality in FCC homes, measured using the Family Day Care Rating Scale (FDCRS) and the Caregiver Interaction Scale (CIS), showed that both "structural" features (like providers' education and years of experience) and providers' beliefs (about children, caregiving, and job stress) predicted quality (Hughes-Belding, Hegland, Stein,

1 We exclude family, friend, and neighbor care as well as nannies and babysitters from our definition of FCCs, focusing instead on home-based child care that is run as a business.

Sideris, & Bryant, 2012). Similar findings have come from studies of center-based classrooms using the CLASS measure (e.g., Pianta, Howes, Burchinal, Bryant, Clifford, Early, & Barbarin, 2005). Likewise, a study of child care in poor communities found that caregiver-child interactions, measured using the CIS, predicted social/emotional outcomes across different types of care, including FCC homes (Loeb, Fuller, Kagan, & Carrol, 2004). These studies do not provide direct information about how the CLASS measure works in FCC homes, but do suggest that interactions in FCC homes matter for children and are associated with setting characteristics and provider beliefs, as they are in centers.

The remainder of this brief discusses the evidence that is available, as well as factors to consider when using the CLASS measure in FCC homes—how the setting, number of children present, and other factors may affect interactions. We present information from two projects that have conducted observations in FCC homes. The first, the Family Life Project[2], conducted pre-K CLASS observations in rural child care settings, including 12 FCC homes. For the second project, conducted by Teachstone, we sent observers into nine FCC homes (some of which were observed using multiple age levels) to better understand the complexities of using the CLASS observation tool in these settings and to practice options for coding. The very small number of providers in each study makes it impossible to draw definitive conclusions, but the data and our experiences can begin to shed some light on this important topic.

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CLASS Data from Family Child Care Homes

While the data are very preliminary, pre-K CLASS averages from several studies show similar patterns of scores in classrooms and FCC homes. Figure 1 shows data from four observation projects:

- The NCEDL 11-State Study (Keys et al., 2013), which included 721 publicly funded classrooms *(note: this study did not report Classroom Organization scores)*
- Head Start data,[3] which included observations in 388 grantees
- The Family Life Project, which included 428 classrooms and 12 FCC homes
- Teachstone observations, which included 5 FCC homes observed with the Pre-K CLASS tool

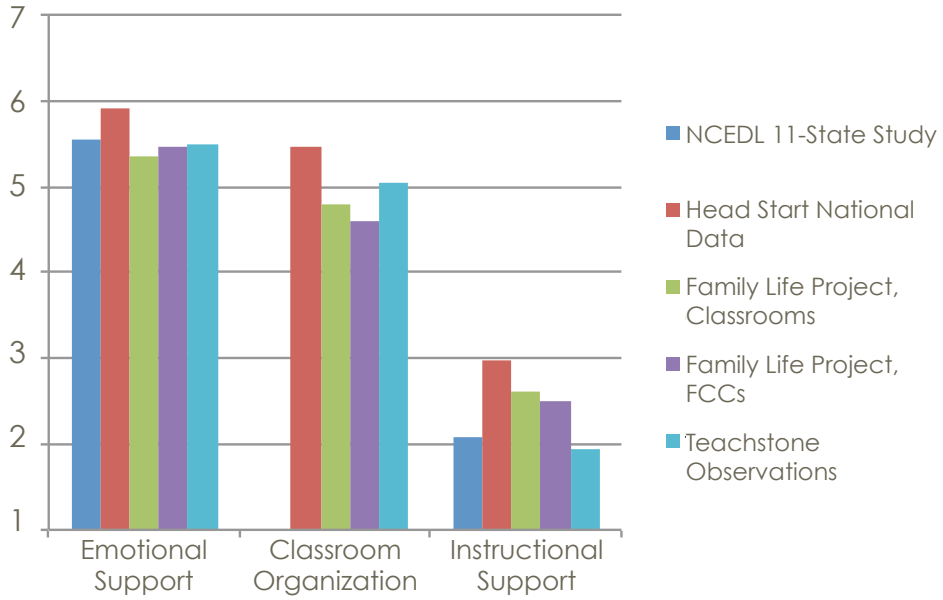
The data show that pre-K CLASS domain scores in FCC homes were generally in line with averages from classroom observations. Furthermore, the FCC data show the same general pattern that is seen in classrooms, with the highest scores in Emotional Support and the most room for growth in Instructional Support. In the Family Life Project data, only one dimension, Negative Climate, showed significantly different scores in centers versus FCC homes; FCC homes had slightly lower negativity.[4]

2 See http://projects.fpg.unc.edu/~flp/

3 See http://eclkc.ohs.acf.hhs.gov/hslc/sr/quality/class-data.html

4 Classrooms: *mean* = 1.18, *standard deviation* = .52; FCCs: $m = 1.04$, $sd = .14$; $t = 2.89$, $df = 20.38$, $p < .01$, equal variances not assumed

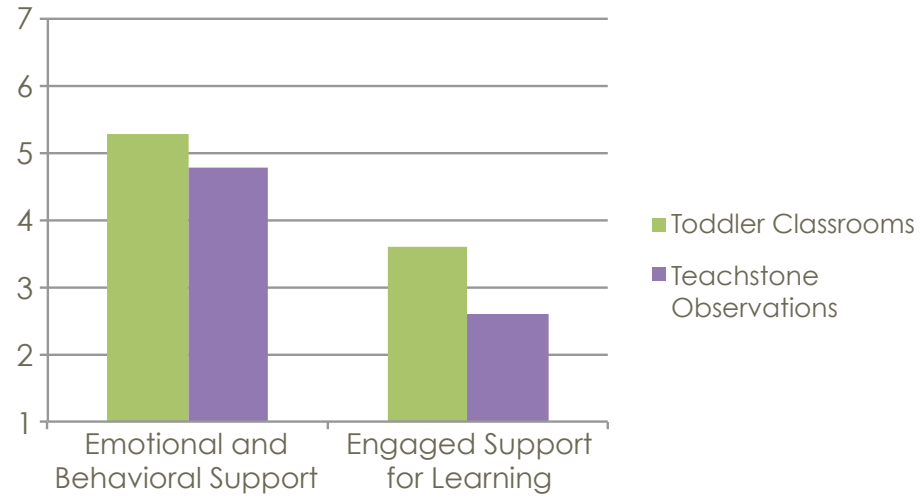
Figure 1. Average pre-K CLASS scores across projects.



Toddler observations tell a similar story. Figure 2 shows data from a project that included observations in about 300 classrooms compared with Teachstone observations in five homes. While the averages cannot be directly compared, the same pattern is seen in both types of settings, with higher scores in Emotional and Behavioral Support and lower scores in Engaged Support for Learning.

Taken together, the data suggest that average CLASS scores are similar across settings and follow the same basic patterns.

Figure 2. Average toddler CLASS scores across projects.



Observing in Family Child Care Homes

Observing in FCC homes can pose some unique challenges, especially for observers accustomed to center-based care. Our recommendations are based on conducting observations in the field, speaking with FCC professionals, and reading about family child care. Below are the challenges we have learned about and our recommendations for addressing each one.

Challenge #1: FCC homes include children across multiple age levels. From birth to five years old, the CLASS observation tool is divided into three age levels: Infant (6 weeks to 18 months, available in 2014), Toddler (15 to 36 months), and Pre-K (3 to 5 years). This was done to best capture developmentally appropriate interactions at each unique stage. It poses a challenge when children across age levels are served within a single setting, however. We have explored four options for addressing this:

1. **Choose a single age level and use it across all settings.**

   Using a single age level allows you to train your observer team on a single tool. This makes it easier for observers, who only need to use a single CLASS lens while observing. However, the age level you choose may not be appropriate for all settings.

2. **Use the age level that corresponds to the majority of children in the setting.**

   This method allows you to capture the experiences of the majority of children. Enrollment in FCC homes can be inconsistent, though, so observers need to be trained across age levels and be ready to use whichever manual is most appropriate. Also, because many FCC homes serve a small number of children, the majority age level may be only slightly more prevalent than the next most common (for example, if a home serves two toddlers and one preschooler).

3. **Use a hybrid tool.**

   The evaluators of the Washington State Seeds to Success QRIS combined the /Toddler and Pre-K CLASS tools (Joseph, Feldman, Brennan, Naslund, Philips, & Petras, 2011).[5] During each observation, they observed all children using the dimensions that are common across the two age levels, and observed only age-appropriate children on the dimensions that differ. This approach has a lot of potential. To use the hybrid tool, observers have to become reliable on both age levels of the CLASS observation. Since this is a new approach, we also recommend that teams establish their own reliability in the field by doing some coding in pairs and comparing scores.

4. **Our recommendation: Alternate between two age levels.**

   We recommend that observers be trained on two age levels and alternate between cycles of each, aiming for at least three cycles at each age level. This approach captures the experiences of most children in the setting, but still produces independent scores for the two age levels. This is important because settings can provide very different quality of care for different age groups (see Figure 3), information which could guide professional growth recommendations. It also increases the flexibility of the observation: observers can switch age levels as children arrive, leave, or go down for naps. It requires observers to be very flexible and comfortable with both age levels, which can be a challenge for inexperienced coders.

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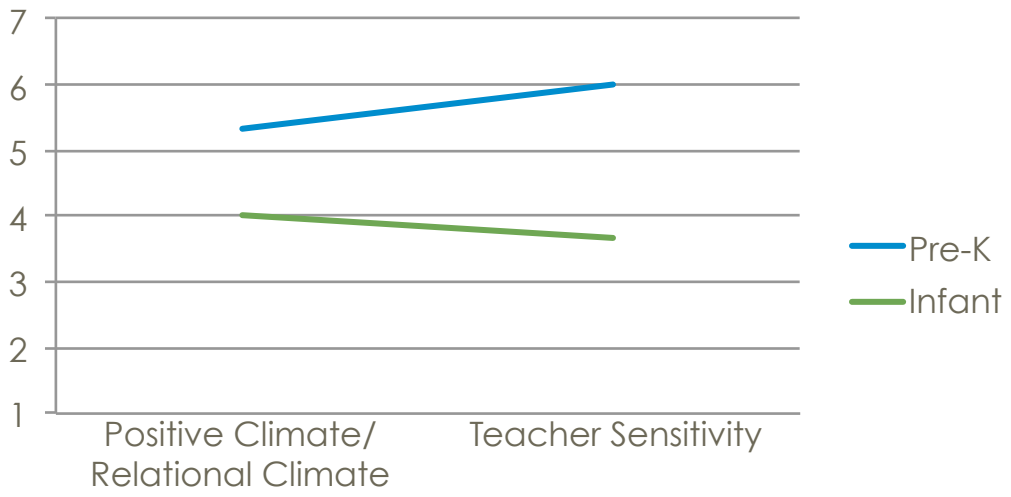
5 A report providing more information on this approach can be found at this address: http://www.del.wa.gov/publications/elac-qris/docs/Seeds_to_Success_Final_Evaluation_June_2011.pdf

Figure 3. Illustration of infant and pre-K scores from a single FCC home



These sample data illustrate a home in which the preschool-aged children receive highly effective interactions, while the infants receive mid-level interactions. A provider like this may need extra support to balance her time and attention across children with very different developmental needs.

Challenge #2: Low numbers of children. In classrooms, we recommend that observers wait until at least four children are present to begin observing. FCC homes may serve fewer than four children of a single age level, though. Before conducting observations, define a clear protocol about when to start observing. Given the realities of these settings, observers may at times be observing only one or two children. That is acceptable as long as a consistent protocol is used for every FCC home being observed.

Challenge #3: Reduced objectivity. FCC homes can pose challenges to observers' objectivity. Small spaces and being in the provider's home can make observers feel intrusive and uncomfortable. One of the children may be the provider's own son or daughter, which puts observers in the unexpected position of coding parent-child interactions rather than teacher-child interactions. FCC providers may need to do household tasks, such as preparing meals or doing laundry, that are usually handled by another staff member in center-based care. Also, interactions with children outside the target age level may be hard to code appropriately (see Box 2).

The key to staying objective is to support observers in remaining grounded in the CLASS manual. Observers should take detailed notes and use their manuals to assign codes. Hold debriefing sessions periodically to review challenges and share strategies for staying objective. If providers are receiving feedback on their scores, it may also help if the person providing feedback is different from the observer, to help prevent unintentional bias in coding.

Challenge #4: Multiple adults. The presence of multiple adults poses a challenge in classrooms, and even more so in FCC homes. Some FCC homes have two or more caregivers and allow children to move freely from room to room, others have non-caregiver adults present—older children, spouses, or grandparents.

A clear observation protocol can guide decision making if children and adults can move between rooms. Consider the purpose of the observation: are you trying to determine how effective the primary provider is? Or are you evaluating the effectiveness of that setting for a particular group of children? If the main purpose is to evaluate the provider, the observer should follow that provider. If the goal is to evaluate the setting for preschoolers, toddlers, or infants, stay

where the majority of those children are.

Non-caregiver adults should be treated the same way as children outside of the target age range. Their interactions should be taken to account in coding if they enhance or detract from children's experiences. A grandmother who does puzzles with preschoolers while the provider sets out lunch, or a teenager who blasts the TV all morning, can influence the climate and quality of interactions as children experience them.

Other coding challenges may arise. We encourage observers to stay grounded in the CLASS manual and to take advantage of opportunities to practice coding by doing double coding in the field, calibration through Teachstone, and annual recertification. Please reach out to Teachstone with additional questions or comments about coding in FCC homes; we aim to continue learning and disseminating what we learn.

Q. Imagine using the Pre-K CLASS measure to observe a group with three preschoolers, two toddlers, and an infant. How do the provider's interactions with the younger children count toward the Pre-K CLASS score?

A. When you use the CLASS measure, you are evaluating the setting's effectiveness for the target age group; in our example, you are coding the interactions experienced by the preschoolers. Interactions with other children count in scoring only if they enhance or detract from the target children's experiences.

If the provider involves all of the children in singing and clapping, or invites the preschoolers to help with the babies, pre-K CLASS scores may be higher. If the provider ignores the preschoolers while caring for the younger children, pre-K CLASS scores may be lower—even if the provider has wonderful interactions with the babies during that time.

This principle applies for all age levels of the CLASS: if you are observing with the Infant CLASS measure, you are evaluating the experiences of infants and count interactions with older children only if they enhance or detract from the infants' experiences, and likewise with other age levels.

Professional Development for Family Child Care Providers

With all caregivers, we recommend starting with introductory information and deepening from that point. With FCC providers, managing multiple age levels is again the biggest challenge. We recommend starting by introducing the toddler CLASS framework using the Introduction to the Toddler CLASS Tool program, Video Library, and *CLASS Dimensions Guide*. Providers should understand that, across age levels, caregivers' interactions with children are very important; that they should aim to observe and be responsive to children's cues; and that they should scaffold children's development in all domains by supporting them as they try to master new skills.

Once providers have established a basic, foundational understanding of teacher-child interactions, they can begin deepening their knowledge and strengthening their interactions with children. Preliminary data suggest that, like classroom teachers, FCC providers struggle most in providing Instructional Support, so this may be a good place to focus initially.

One challenge is to balance *breadth*—understanding interactions across age levels—with *w*—forming a deep understanding of interactions within a target dimension. We recommend that providers begin by doing an in-depth study of one toddler CLASS dimension using videos and the *Toddler CLASS Dimensions Guide*. When they have a strong understanding of that dimension, they can broaden to examine what similar interactions look like in older and younger children.

For example, a provider can begin by studying Language Modeling in the toddler CLASS framework. She can read about the dimension, watch videos, and look for opportunities to expand her language use with the toddlers in her care. Then she can begin to read about pre-K Language Modeling and think about the similarities and differences between what preschoolers and toddlers need. Using videos, reading the Dimensions Guides, and observing the children she works with, she can start to expand her skills. Teachstone provides resources to help providers improve their interactions, whether they are working on their own or as part of a learning community.

Providers should also consider how to plan for effective interactions with all children. They can be encouraged to think about each child's experiences in the classroom and what each child may get out of daily activities. For example, when the provider is doing a structured activity with preschoolers, what can the infants do? What can the toddlers do? How can time and activities be structured to engage all children?

More research is needed on CLASS-based professional development in FCC homes. However, these recommendations provide a starting point for working with providers across age levels.

Conclusions

Research in center-based classrooms has shown that interactions are important for children's social, behavioral, and academic growth. Although little data exists on the CLASS measure in family child care homes, studies suggest that caregiver-child interactions are important in these settings as well, and therefore deserve attention. Observing can pose challenges, but using two CLASS age levels and preparing observers and providers in advance can strengthen the value of the observations. Professional development, too, can be a challenge, but the key is to balance providing depth (in each dimension) with breadth (across age levels).

We encourage you to reach out to us with your questions and experiences using the CLASS measure in FCC homes. Email the author at virginia.vitiello@teachstone.com.

Resources for Family Child Care Settings

There are a number of resources available to support use of the CLASS tool in FCC homes:

- To help ensure fair and accurate CLASS data, Teachstone provides CLASS Observation Training and certification at various age levels. In addition to learning to use the CLASS measure, certified CLASS Observers are eligible to attend the CLASS Train-the-Trainer program, where they learn to deliver selected CLASS programs to others within their organizations.
- Caregivers may increase their abilities to understand, identify, and provide effective interactions using the Introduction to the CLASS Tool, Video Library, *CLASS Dimensions Guides*, and other professional development resources.

Visit www.teachstone.com for more information.

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